

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION**

LEAGUE OF WOMEN VOTERS OF
MICHIGAN, ROGER J. BRDAK,
FREDERICK C. DURHAL, JR., JACK
E. ELLIS, DONNA E. FARRIS, WILLIAM
“BILL” J. GRASHA, ROSA L. HOLLIDAY,
DIANA L. KETOLA, JON “JACK” G.
LASALLE, RICHARD “DICK” W. LONG,
LORENZO RIVERA and RASHIDA H.
TLAIB,

Case No. 17-cv-14148

Hon. Eric L. Clay
Hon. Denise Page Hood
Hon. Gordon J. Quist

Plaintiffs,

v.

RUTH JOHNSON, in her official capacity as
Michigan Secretary of State, et al.,

Defendants.

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**SECRETARY OF STATE RUTH JOHNSON’S REPLY IN FURTHER
SUPPORT OF HER MOTION IN LIMINE TO EXCLUDE THE REPORT
OF DR. JOWEI CHEN**

Dr. Chen destroyed his source code; his report and plans cannot be admitted.

Dr. Chen's source code is *the* critical document on which all of his work is based. It is the precise set of instructions he gave the computer for drawing his plans. But, according to Dr. Chen, that source code no longer exists. Though he knows how to save source code, he did not save *the* source code. (PageID.6378.)

Dr. Chen's justification for the destruction of his source code is that he overwrote it to perform work for other states. (PageID.6380-6382.) Intent in the destruction of evidence does not matter.¹ The fact is that the Secretary cannot use his instructions to determine exactly what he did or to cross examine him at trial.

Dr. Chen plainly knows the source code is required to verify his work. Another expert (in Pennsylvania's recent redistricting litigation) was criticized by the court for *not* reviewing Dr. Chen's source code.² (As the Secretary noted, Dr. Chen's source code has *never* been reviewed by an opposing party's expert.)

Plaintiffs offer up various "solutions" to their self-inflicted problem. First, they say: the Secretary has Dr. Chen's *.jar* code that he used to create his plans.

¹ See *Cabrera v. Cordis Corp*, 134 F.3d 1418, 1422 (9th Cir. 1998) (excluding blood testing results where records of expert were destroyed in an earthquake).

² See *League of Voters v. Commonwealth*, 178 A.3d 737, 779-780 (Pa. 2018) (finding Dr. Wendy Cho's criticisms of Dr. Chen's simulation exercise to be "incredible" because she "did not actually review either Dr. Chen's or Dr. Pegden's algorithms or codes" in the short time frame during which she was to prepare her report.)

(PageID.6378-6381.) (It turns out that she actually does not.)³ But *Jar* code is ones and zeros. It does not reveal instructions. *Nobody* can read it and determine if it is what Dr. Chen claims, and Plaintiffs do not (and cannot) argue to the contrary.

Second, Plaintiffs say: The Secretary can decompile the *.jar* code and read the decompiled version. (PageID.6382.) Plaintiffs even have an entirely new expert—one who was not previously disclosed and who has no knowledge of the underlying facts (and who thus is an improper declarant)⁴—saying that decompiled code *can be* readable “if significant expertise and resources are devoted to understanding” it. (PageID.6382.) But that expert (Dr. Severance) does not *himself* try to read the decompiled code. He *does not* tell the Court that he was able to verify Dr. Chen’s claims. He just says it *could* be possible. (*Id.*) This is no solution either.

³ As is now apparent from Plaintiffs’ Response, Dr. Chen did not provide even the actual byte code file he used to create his plans. (PageID.6380-6381.) The file he describes in paragraph 16 of his declaration is not the same file as described in paragraph 17. He claims that he “recompiled” bytecode to rename it (something that could have been done just as easily in Microsoft Explorer without altering the internal metadata) and that this explains why the class file compiling date is June 12, 2018 instead of an earlier date. The parties agreed in their Joint Rule 26 Report to produce native electronically stored information including “date modified” metadata where available. (PageID.280.) The reason metadata is addressed in Rule 26 reports is to avoid precisely this type of dispute.

⁴ Fed. R. Civ. P. 37(c)(1) provides that “if a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion ... unless the failure was substantially justified or is harmless.” Dr. Severance was never disclosed by Plaintiffs during discovery, and discovery has long been closed in this matter.

Third, Plaintiffs say: The Secretary has Dr. Chen’s “draft,” and Dr. Chen *says* or *recalls* that he did not make any significant changes to the draft before compiling. (PageID.6378-6379.) The Secretary does not believe Dr. Chen. For one thing, Dr. Liu has already found significant changes between the “draft” source code and readable portions of the decompiled byte code. (*See* ECF No. 147, PageID.5377-5378.) Dr. Liu has identified the *specific* lines of code for some of these changes in his attached Declaration. (*See* Exhibit 1.) Those changes—on crucial matters like how to limit county breaks and how to achieve compactness—impacted the drawing of the Dr. Chen’s plans. Dr. Chen says he “recalls” that he made only “cosmetic” changes. (PageID.6379.) He apparently does not “recall” making the changes Dr. Liu found in the decompiled bytecode, which are indisputably *not* cosmetic.

Fourth, Plaintiffs say: The Secretary should just draft her *own* source code based on what Dr. Chen claims he did; she could then “re-run” Dr. Chen’s simulation exercise from scratch. (PageID.6384, 6393.) That suggestion is patently absurd, and moreover, that whole exercise⁵ would be unnecessary if Dr. Chen *had just saved the source code in the first place*. Further, Plaintiffs’ “solution”—i.e., re-running the simulation—is not realistic given the demands of this case. Dr. Chen (who was retained in February of 2016) had 2 *years* to draft his code and perform his

⁵ Plaintiffs do not offer to pay for this “re-run” simulation nor to adjourn trial while this exercise occurs.

simulation exercise. (PageID.6377.) His simulation code indicates that it can take upwards of 40 days⁶ to draw just one map; he drew 3,000. (See PageID.5375, n. 6; Ex. 1, Liu Declaration, ¶ 4.) Plaintiffs served Dr. Chen's report on the Secretary on June 1; the Secretary retained Dr. Liu on or about June 19; and the deadline for Dr. Liu's report was July 1. Even if Dr. Liu had started running simulations on the June 1 date Dr. Chen's report was served on the Secretary, it is not plain the simulation exercise would even be close to finished now, six months later.

Dr. Chen claims he did not engineer his results. (PageID.6385.) The Secretary does not believe him. Each of Dr. Chen's three simulated sets starts with plans that are exactly *one* seat better for Democrats than the Enacted Plan. (See ECF No. 129-50, PageID.4722, 4734, 4747.) For Democrats, none of his plans is *equal* to, and none of his plans is *worse* than, the Enacted Plan; none of his sets starts with plans that are *two* or *three* or *ten seats better*.⁷ Only the final source code would reveal whether Dr. Chen engineered what looks to be a highly engineered result.

⁶ Dr. Liu could not produce a single map in 10 days. (PageID.5375, n. 6.)

⁷ Assuming, for the sake of argument, that Dr. Chen used only neutral criteria, this means that Plaintiffs have sued the Secretary to stop use of the three Enacted Plans because each is *one seat off* of what a neutral plan would have afforded to Democrats. Plaintiffs, however, challenge 34 districts.

Plaintiffs claim that this all goes to “weight” rather than “admissibility.” It is hard to imagine something that could go *more* to admissibility.⁸ Dr. Chen deleted the key record of his methodology; the Secretary has been deprived of the opportunity cross examine Dr. Chen with that record.

Dr. Chen’s report and plans should be excluded. In the alternative, the Secretary has asked for the appointment of an independent Rule 706 expert to advise the Court on the reasonableness of Dr. Chen’s assertions and Plaintiffs’ positions.⁹

Dr. Chen did not follow the Apol Criteria; his “Chen Plans” tell the Court nothing about what *should* happen if Apol Criteria are neutrally applied.

Plaintiffs say they found some instances in which the 2011 map drawers did not succeed in following Mich. Comp. Laws § 4.261(f) (which requires the shifting of the fewest and smallest municipalities when equalizing population between counties). (PageID.6377.) They claim that this means § 4.261(f) was ignored or repealed, and thus it does not matter that Dr. Chen did not even attempt to follow it. (*Id.*) Of course, that is not true. The map drawers, even if they did not succeed in all cases, were still seeking to follow § 4.261(f) in a way Dr. Chen *never* did.

⁸ See *LVL XIII Brands v. Louis Vuitton Malletier SA*, 209 F. Supp. 3d 612, 645-46 (S.D.N.Y. 2016) (finding experts’ failure to preserve search term methods rendered his report inadmissible for *court’s*—not jury’s—consideration.)

⁹ For reasons unknown, Plaintiffs quote from the Secretary’s July Motion to Compel (ECF No. 37) regarding her *previous* request for a Rule 706 expert. (PageID.6397.) The Secretary is not asking for a Rule 706 expert to opine on what she presented in July; she asks for one to advise the Court on what Plaintiffs *now* claim.

Dr. Chen wholly *ignored* § 4.261(f), even though in his expert report he asserted that the Apol Criteria were *mandatory*. Because he did not even *try* to follow that criteria, he did not replicate what the mapdrawers were doing in 2011.

As the Secretary noted, Dr. Chen also incorrectly followed a non-Apol compactness requirement. Under the Apol Criteria, compactness is only relevant in cities or townships with more than one district. Mich. Comp. Laws § 4.261(i).

Plaintiffs note that the Senate map drawer—Terry Marquardt—said he preferred a configuration of Senate districts (in one instance) because the configuration was “compact.” (PageID.6376.) Plaintiffs assert that this shows the mapdrawers were using the same (non-Apol) compactness goal as Dr. Chen. (*Id.*) But Terry Marquardt was testifying about a configuration of districts *in Wayne County*. (See ECF No. 160-4, Marquardt Dep., 111:24-112:8, 107:14-16.) Wayne County is the one County in the State with a municipality (Detroit) that *must* have more than one Senate district. The Apol Criteria thus call for compactness in configurations in Wayne County. Mich. Comp. Laws § 4.261(i).

Dr. Chen applied compactness *everywhere* (not just Wayne County, contrary to Apol Criteria); Terry Marquardt (and other map drawers) applied it as actually instructed by the Apol Criteria. *Id.*

Incredibly, Dr. Chen readily admits that he included an output limitation in his instructions setting a minimum threshold for county breaks. (PageID.6385.)

(That is, he told the computer to output a plan *only* if it had fewer county breaks than the Enacted Plan.) But *there is no minimum threshold for county breaks in the codified Apol Criteria*. The mapdrawers did not have a fixed minimum threshold in mind in carrying out the goal of eliminating county breaks; they used trial and error.

Because Dr. Chen did not replicate the map drawers's neutral criteria, he cannot reasonably make claims about what caused his plans to differ from theirs. He cannot say—and disavowed that he could say—whether it “is” or “is not” possible that his simulation exercise would have drawn plans like the Enacted Plan if he had tried to follow the actual Criteria. (*See* ECF 147-1, Chen Dep., 152:24-152:27.)

Dr. Chen's plans are counterfactual hypotheticals never presented or considered by the Legislature 2011. For him to “ferret out” whether intent is the sole explanation for the reason the Enacted Plan looks the way it does, Dr. Chen had to at least start from the same neutral Criteria actually codified by the Legislature. He did not. He admits he did not. The “Chen Plans” are not “Apol Plans,” and they tell us nothing about how Apol Plans *should* look if neutrally drawn. His conclusions are not reliable, and his plans are not relevant: both should be excluded.

Respectfully submitted,

DICKINSON WRIGHT PLLC

JONES DAY

/s/ Peter H. Ellsworth

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December 21, 2018

CERTIFICATE OF SERVICE

I hereby certify that on December 21, 2018, I caused to have electronically filed the foregoing paper with the Clerk of the Court using the ECF system, which will send notification of such filing to all counsel of record in this matter.

/s/ Ryan M. Shannon

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